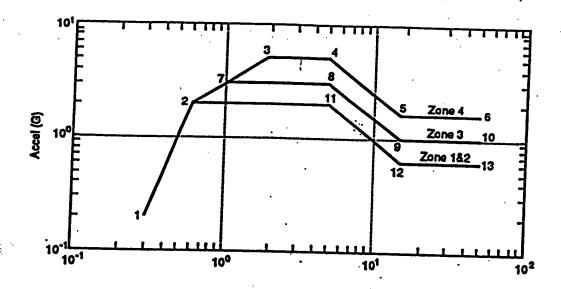


Earthquake Synthesized Waveform - VERTEQII

Fig 1A





Coordinate Point	Frequency (Hz)	Values for Upper Floor Acceleration (g)	Coordinate Point	Frequency (Hz)	Values for Upper Floor Acceleration (g)	
	Zones 1 and 2 .			Zone 4		
1	0.3	0.2	1	0.3	0.2	
2	0.6	2.0	2	0.6	2.0	
11	5.0	2.0	3	2.0		
12	15.0	0.6	4	5.0	5.0	
13	50.0	0.6	5	15.0	5.0	
	Zone	the state of the s	6		1.6	
1	0.3	0.2		50.0	1.6	
2	0.6	2.0				
7	1.0	3.0				
8	5.0	3.0				
9	15.0	1.0				
10	50.0	1.0				

FIG 1B

200

::

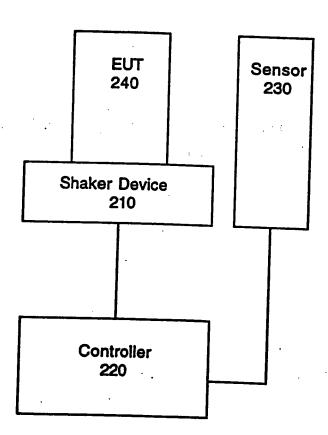


FIG 2



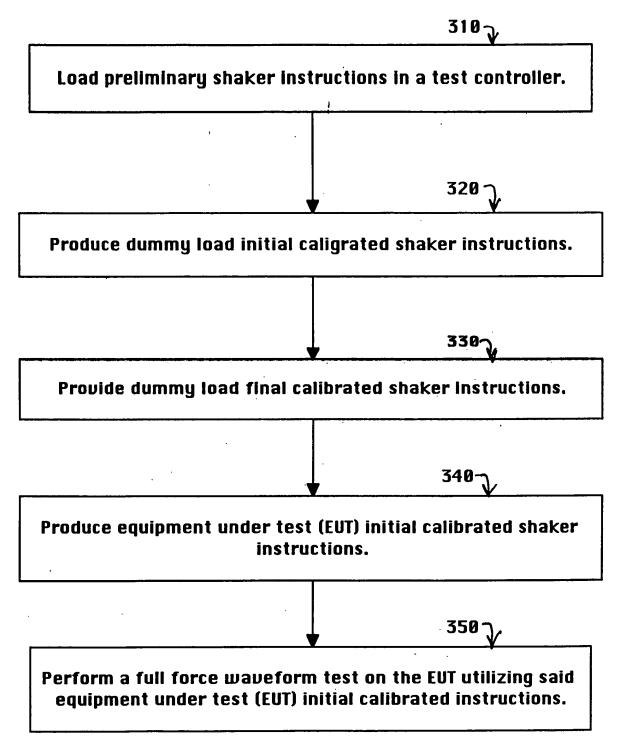


FIG. 3A



322 γ

Shake a dummy load at a first attenuated value of the preliminary shaker instructions.

323 -

Measure the actual accceleration time history movement of the dummy load when shook at the attenuated value of the preliminary shaker instructions.

324 **~**

Analyze if a dummy load attenuated test response spectrum (TRS) is projected to be within acceptable range of a required response sepctrum(RRS) requirements.

325 ~

Make adjustments in the preliminary shaker instructions to produce the dummy load initial calibrated shaker instructions, the adjustments calculated to bring a dummy load full strength test response spectrum within acceptable range of the required response spectrum (RRS)





332₇

Shake a dummy load at full strength value of the dummy load initial calibrated shaker instructions.

333

Measure the actual acceleration time history movement of the dummy load when shook at the full strength value of the dummy load initial calibrated shaker instructions.

334 ·

Determine if the dummy load full strength test response spectrum (TRS) is within an acceptable range of the required response spectrum (RRS).

335 -

Make adujustments in the dummy load initial calibrated shaker instructions to produce the dummy load final calibrated shaker instructions, the adjustments calculated to brnig a test respons spectrum (TRS) within an acceptable range of the required response spectrum (RRS).



342

Shake equipment under test at a second attenuated value of the dummy load final calibrated shaker instructions.

343

Measure the actual acceleration time history movement of the equipment under test when shook at the attenuated value of the predetermined waveform.

344

Determine if the equipment under test attenuated test response spectrum (TRS) is within an acceptable range of the required repsonse spectrum (RRS).

345^

Make adjustments to the dummy load final calibrated shaker instructions to produce the equipment under test attenuated shaker instructions if the dummy load full strength test response spectrum (TRS) is not within an acceptable range of the required response spectrum (RRS).



352

Shake equipment under test at a full strength value of the equipment under test final calibrated shaker instructions.

353 _J

Measure the actual acceleration time history movement of the equipment under test when shook at the full strength value of the predetermined waveform.

354~

Determine if the test response spectrum (TRS) is wihin acceptable range of the required response spectrum (RRS).



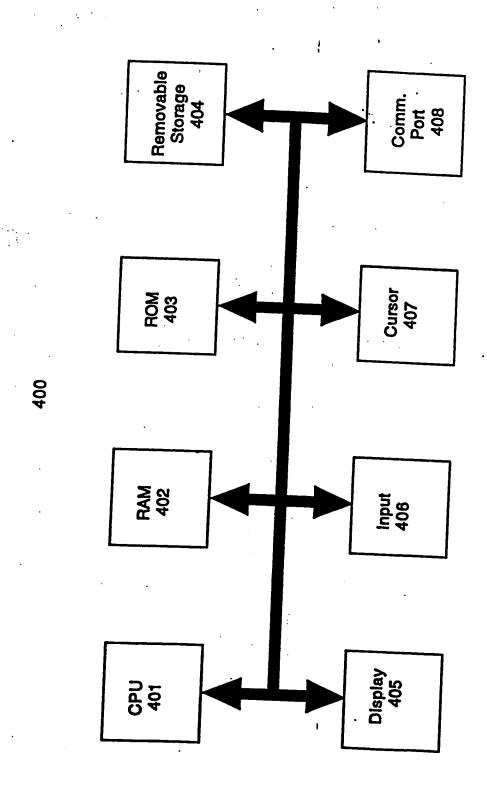
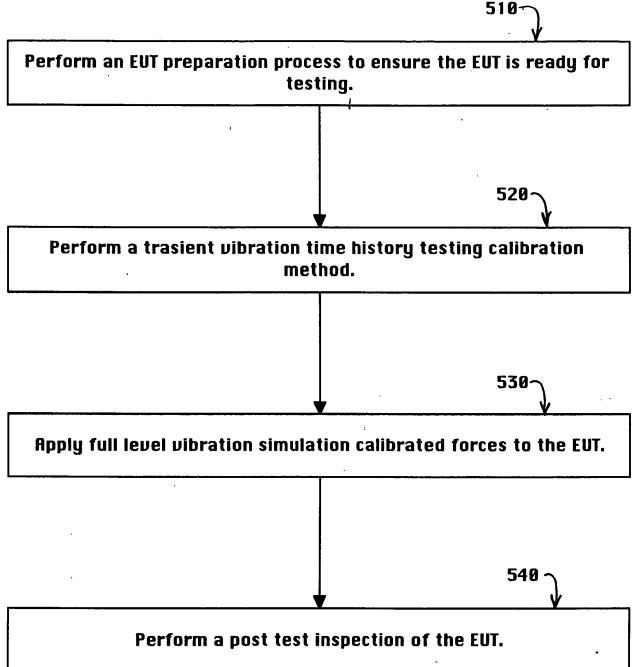


FIG 4









Determine if it is approriate to test the EUT at a frame-level or a shelf-level.

620-

610

Configure a frame to a known realistic configuration per an anticipated end-use installation.

630 -

Preform a pre-test inspection process to detemine the pre-test condition of the EUT.

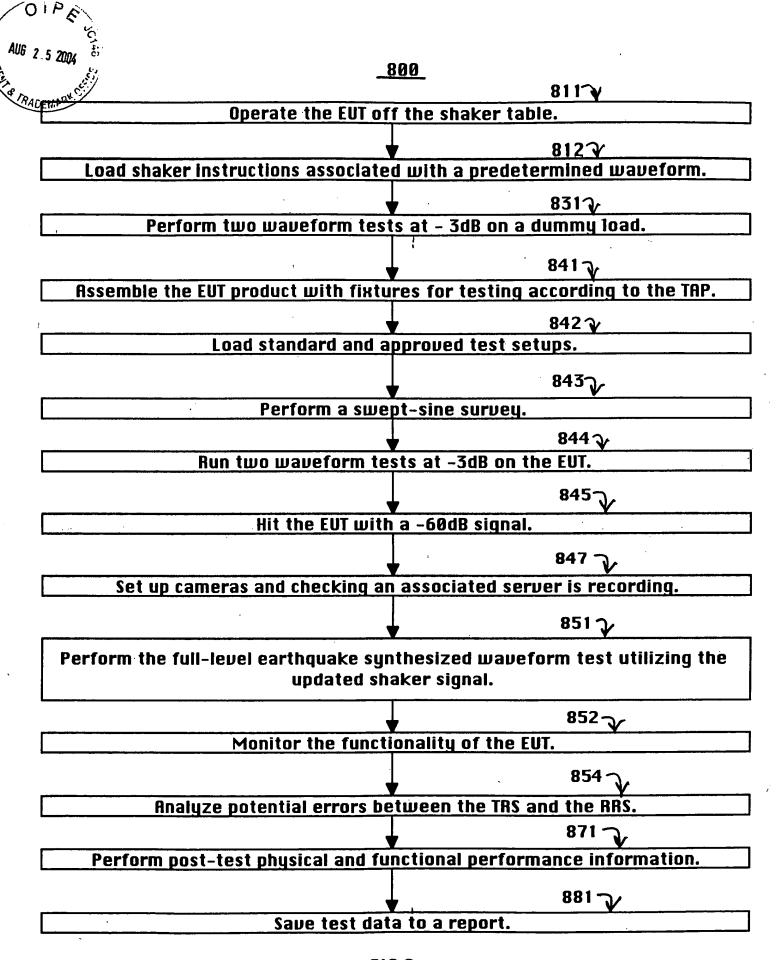
640-

Perform an end use compensation process that compensates for impacts from end use apenditures anticipated to be coupled to the EUT.



. Test Parameter	Performance Criteria	Test Tolerance TRS less than 30% over RRS from 1 to 7 Hz Not Applicable	
VERTEQII waveform	TRS shall meet or exceed RRS		
Acceleration	synthesized waveform 1.6 G's peak for 30 seconds		
data sample rate	200 Hz		
est frame system	125 n	Not Applicable	
veight	435 Ibs (approximately)	+/- 5%	
oad-cell torque	un to 65 & 15 -		
Displacement		H- 1 ft-lb	
rack top)	76.2 mm maximum	+/- 5 mm	

FIG 7





Test Parameter	Performance Criteria	Test Tolerance	
Frequency Range	1 to 50 Hz		
Sweep Rate	_1.0 octave/minute	Not Applicable	
Acceleration	0.2 G's	Not Applicable	
data sample rate .	200 Hz	H- 0.02 G's	
est frame system weight		Not Applicable	
-John Weight	435 lbs (approximately)		

FIG 9



: Model #	Code Nam	e Business Unit	•	
•	:	:	BU Contact	
Date	Vertical	Front-to-Back	[: 	
Time		in.	Pide-to-Side	
Test Engineer or Technician	-			
Frame Top Resonant Frequency (Hz)				
EUT Resonant Frequency (Hz)				
Peak Acceleration Response at the top of the Frame (G)				
Displacement (inches or mm)			.	
oors, Covers, Panels				
racks, Buckles, Visual spection				
olt or Anchor Torque values				
oad Cell values (lb, all 4)				
ED Status during the Test		·		
agnostic or software action during the Test				
Imments				

F19 10